

Remarks

Receipt is acknowledged of the Final Office Action mailed October 21, 2005. Applicants seek to amend claims 1, 6, 7, 9, 11, and 14-20 as noted above; however, no new matter will be introduced upon entry of the proposed amendments. Accordingly, claims 1-20 remain pending upon entry of this amendment.

Applicants appreciate the Examiner's indication that claims 3-5 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Claim Rejections under 35 USC § 102

Claims 1, 2, 6-10, and 14-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Published U.S. Patent Application No. 2002/0084833 to Kim et al. ("Kim"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 1 has been amended to now recite a "main oscillator" in addition to a "sub oscillator." More specifically, claim 1 is amended to recite, *inter alia*, "a sub oscillator for outputting a sub oscillating signal *in response to the first control signal*" as well as "a main oscillator for outputting a main oscillating signal *in response to the second control signal*." (emphasis added). Thus, in the instant invention, the main oscillator 300 generates a main oscillating signal in response to a second control signal to drive main pump 500. Likewise, the sub oscillator 310 generates a sub oscillating signal in response to a first control signal to drive the sub pump 510. Still further, amended claim 1 now recites "sub pump circuit for boosting the output voltage in response to the sub oscillating signal" and "a main pump circuit for boosting the output voltage in response to the main oscillating signal." Thus, the instant invention contains multiple pump circuits which operate independently of one another and can pump either simultaneously or separately.

In this manner, not only does the instant invention recite multiple oscillators and pump circuits, but moreover, the oscillators and pump circuits are operated

independently from one another and in response to two separate control signals. See e.g., page 10, ll. 13-15 of the specification.

In contrast, Kim discloses a singular oscillator 200 which outputs a pulse signal PUL in response to single control signal DET1. Kim fails to disclose both the main oscillator and the sub oscillator. Moreover, Kim fails to disclose the multiple pump circuits which operate independently of one another. Rather, Kim discloses multiple pump circuits 40-1 through 40-n. As shown in Fig. 3 of Kim, while pump circuits 40-2 through 40-n are selectively driven by NANDing a pulse signal PUL and the second to nth level detection signals DET2-DETN, pump circuit 40-1 will always operate irrespective of any control signal. Thus, the pump circuits of Kim do not boost the output voltage in response to control signals as recited in the instant invention. Accordingly, Applicants respectfully submit that Kim does not disclose the claimed invention as amended. Accordingly, claim 1, as well as claims 2-8 by virtue of their dependence on claim 1, are believed to be allowable for at least the aforementioned reasons.

Claim 9 has been amended to now recite “means for boosting the output voltage in response to the first control signal, wherein the means for boosting the output voltage in response to the first control signal includes means for outputting a first oscillating signal in response to the first control signal and means for boosting the output voltage in response to the first oscillating signal; a main booster for boosting the output voltage in response to the second control signal, wherein the means for boosting the output voltage in response to the second control signal includes means for outputting a second oscillating signal in response to the second control signal and means for boosting the output voltage in response to the second oscillating signal.” For the same reasons stated above with respect to claims 1-8, claims 9-15 are believed to be allowable.

Claim 16 has been amended to now recite “boosting a first voltage signal *in response to the action signal and a first oscillating signal* when the output voltage is less than a first reference voltage” and “boosting a second voltage signal *in response to the action signal and a second oscillating signal* when the output voltage is less than a second reference voltage which is less than the first reference voltage” (emphasis

added). Thus, as above, claim 16 recites a method wherein the output voltage is independently boosted in response to two separate and distinct oscillating signals. As above, Kim fails to disclose such a feature. Accordingly, claim 16, and claims 17 and 18 by virtue of their dependence on claim 16, are believed to be allowable.

Claim 19 has been amended to now recites "*a first sub oscillator for outputting a first sub oscillating signal and a sub pump for boosting the first voltage signal in response to the first oscillating signal*" and "*a main oscillator for outputting a main oscillating signal and a main pump circuit for boosting the second voltage signal in response to the main oscillating signal.*" For the same reasons stated above with respect to claims 1-18, claims 19 and 20, by virtue of its dependence on claim 19, are believed to be allowable.

Thus, for the foregoing reasons, Applicants respectfully request the withdrawal of the rejections under 35 U.S.C. §102(b).

Conclusion

In view of the above amendment and remarks, Applicants respectfully request that all objections and rejections be withdrawn and that a notice of allowance be forthcoming. The Examiner is invited to contact the undersigned representative for Applicants for any reason related to the advancement of this case.

Respectfully submitted,

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